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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/037,729	11/09/2001	Alan DeMars	064645-1051	7394
27045	7590	05/17/2005	EXAMINER	
ERICSSON INC. 6300 LEGACY DRIVE M/S EVR C11 PLANO, TX 75024			JAIN, RAJ K	
			ART UNIT	PAPER NUMBER
			2664	

DATE MAILED: 05/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/037,729	DEMARS ET AL.	
	Examiner	Art Unit	
	Raj K. Jain	2664	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 November 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 14-21, 25-29 and 31-37 is/are rejected.
- 7) ☒ Claim(s) 11-13, 22-24, 30, 38 and 39 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>11/09/01</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-40 examined on the merits.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 3-24, 26-40 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 4-15, 18-32, 38-46 of copending Application No. 09/972,270. Although the conflicting claims are not identical, they are not patentably distinct from each other because it would have been obvious to one of ordinary skill in the art at the time the present invention (10/037729) claims are broader than the copending Application 09/972,270.

Comparison of the two applications:

Claims 1, 14 and 26 of present application discloses a method, system and apparatus for creating packet using digital signal processors, the packet is created by

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attaching one or more headers to a data portion of the packet. Similarly, claims 1, 15 and 28 of co-pending Application No. 09/972,270 also discloses a method, system and apparatus for creating packet using digital signal processors with an addition of compressing one or more headers. Both application claim languages are phrased differently to claim the same subject matter, thus they are not patentably distinct from each other.

Claims 3-24, 26-40 of the present application are identical to claims 4-15, 18-32, 38-46 respectively of co-pending Application No. 09/972,270.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Koodli (US 6,608,841).

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Regarding claim 1, Koodli discloses system and method for achieving robust IP/UDP/RTP header compression in the presence of unreliable networks, comprising the steps of:

- receiving call set-up information (Fig 1, references 24 and 26, col. 5 lines 22-24),
- receiving call data (Fig 1, references 24 and 26, col. 5 lines 24-27),
- creating a data portion of the packet using the call data (col. 5 lines 22-27),
- creating one or more current headers (reference IP/UDP/RTP) using the call data and the call set-up information (Fig 2A-B, col. 5 lines 41-43 and col. 5 line 66 to col. 6 line 3), and
- creating the packet by attaching the one or more compressed headers to the data portion of the packet (Fig 2A, col. 5 lines 41-43).

Regarding claim 2, Koodli discloses updating of headers due to change in data (see col 2 lines 39-50).

Regarding claim 3, Koodli discloses a general network architecture with terminals 20 (Fig 1) which may also consist of switch networks, links etc.

Regarding claim 4, Koodli discloses wherein the one or more headers comprise a real time transport protocol header (Fig 2B, reference 126, col. 6 line 1).

Regarding claim 5, Koodli discloses wherein the real time transport protocol header (Fig 2B, reference 126) is determined by the call data (Fig 1, col. 6 line 66 to col. 7 line 1).

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Regarding claim 6, Koodli discloses wherein the one or more headers comprise a user datagram protocol header (Fig 2B, reference 124, col. 5 line 67 to 01. 6 line 1).

Regarding claim 7, Koodli discloses wherein the user datagram protocol header (figure 2B, reference 124) is determined by the call data (Fig 1, col. 6 line 66 to col. 7 line 1).

Regarding claim 8, Koodli discloses wherein the one or more headers comprise an Internet protocol header (Fig 2B, reference 122, col. 5 line 67).

Regarding claim 9, Koodli discloses wherein the Internet protocol header (reference 122) is determined by the call data (Fig 1, col. 6 line 66 to col. 7 line 1).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 14-20, 25-29, 31-37 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koodli (US 6,608,841) in view of James Aweya (XP-004190486 "On the design of IP routers, Part 1 : Router architectures" Journal of systems architecture, Amsterdam, NL, vol. 46, no. 6, April 2000).

Regarding claims 14 and 26-29, Koodli discloses system and method for achieving robust IP/UDP/RTP header compression in the presence of unreliable networks, comprising the steps of:

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- receiving call set-up information (Fig 1, references 24 and 26, col. 5 lines 22-24),

- receiving call data (Fig 1, references 24 and 26, col. 5 lines 24-27),

- creating a data portion of the packet using the call data (col. 5 lines 22-27),

- creating one or more current headers (reference IP/UDP/RTP) using the call data and the call set-up information (Fig 2A-B, col. 5 lines 41-43 and col. 5 line 66 to col. 6 line 3), and

- creating the packet by attaching the one or more compressed headers to the data portion of the packet (Fig 2A, col. 5 lines 41-43).

Koodli fails to disclose an array of digital signal processors (DSP) and a TDM bus communicably coupling one or more ingress/egress cards and control cards.

Aweya also discloses one or more cards having ingress (Fig 12, reference inbound Processing, page 500, col. 2 lines 1-2), signal processing (Fig 12, steps 1-9 page 500 - page 502) and egress functions (page 501, col. 2 lines 3-7), wherein the signal processing function comprises one or more arrays of digital signal processors (page 493 Fig 5, pares 3.2.2 - 3.4), a switch fabric communicably coupling the one or more ingress/egress cards and a TDM bus (Fig 13, page 502 Para 4.1 —4.3).

An array of DSPs within a switch fabric and plurality of ingress and egress ports allows for flexibility of high performance IP networks demanding greater bandwidths for varied traffic such as voice, video and data.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate an array of DSPs within Koodli so as to allow for

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expansion capabilities of a network that requires high bandwidth accommodating varied network traffic such as voice, video and data for today and the future.

Regarding claims 25 and 40, Koodli discloses updating of headers due to change in data (see col 2 lines 39-50).

Regarding claims 15 and 31, Koodli discloses wherein the one or more headers comprise a real time transport protocol header (Fig 2B, reference 126, col. 6 line 1).

Regarding claims 16 and 32, Koodli discloses wherein the real time transport protocol header (Fig 2B, reference 126) is determined by the call data (Fig 1, col. 6 line 66 to col. 7 line 1).

Regarding claims 17 and 33, Koodli discloses wherein the one or more headers comprise a user datagram protocol header (Fig 2B, reference 124, col. 5 line 67 to 01. 6 line 1).

Regarding claims 18 and 34, Koodli discloses wherein the user datagram protocol header (figure 2B, reference 124) is determined by the call data (Fig 1, col. 6 line 66 to col. 7 line 1).

Regarding claims 19 and 35, Koodli discloses wherein the one or more headers comprise an Internet protocol header (Fig 2B, reference 122, col. 5 line 67).

Regarding claims 20 and 36, Koodli discloses wherein the Internet protocol header (reference 122) is determined by the call data (Fig 1, col. 6 line 66 to col. 7 line 1).

Regarding claims 10, 21 and 37, Aweya discloses the use of media access control sub layer, the switch interface prepares the packet for transmission thru the

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switch fabric (see pages 495-496 Para 3.5 and Fig 7b). The use of a MAC layer helps to decrease latency and increase throughput.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made incorporate a MAC sub layer within Koodli so as to decrease latency and increase throughput.

Allowable Subject Matter

Claims 11-13, 22-24, 38-40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raj Jain whose telephone number is 571-272-3145. The examiner can normally be reached on M-F.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 571-272-3134. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2600.

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A handwritten signature in black ink, appearing to read "R. Jain". The signature is written in a cursive style with a large, stylized "J".

RJ

May 6, 2005